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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,677	02/09/2004	Anthony Julian Bosik	195006-00910	9444

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EXAMINER	
CASTELLANO, STEPHEN J	

ART UNIT	PAPER NUMBER
3781	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/774,677	BOSIK ET AL.	
	Examiner	Art Unit	
	/Stephen J. Castellano/	3781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) *9-13 and 29-43* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 14-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2-22-05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claims 9-13 and 29-43 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention and specie, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on April 19, 2007.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Rowse et al. (Rowse).

Rowse discloses a blast resistant container having a blast resistant panel comprising a first layer of overlapping plates (see Fig. 3, reference sign 30, 32), a compressible second layer 24 adjacent the first layer, a third layer 28 adjacent the second layer, detonation imparts sliding motion to the plates 30, 32 and compression of the second layer while the third layer restricts motion or displacement.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rowse in view of Tansill.

Rowse discloses the invention except for the honeycomb construction of the second layer. Tansill teaches honeycomb structure 85 formed by individual cells 90 (see Fig. 5 and 6)

for a compressible layer adjacent to an inner layer and an outer layer. It would have been obvious to modify the construction of the compressible layer to be honeycomb to control the direction of collapse to be a specific direction while allowing structural stiffness in a direction transverse to the direction of compressibility to provide stiffness, stability and reinforcement in the transverse direction.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowse.

Re claim 3, Rowse discloses the invention except for the first layer being comprised of a plurality of sub layers with overlapping plates. It would have been obvious to enhance the energy absorbing/energy dissipating characteristics of the first layer by duplication of the single layer as Fig. 2, 11 and 12 teach plural energy dissipating layers.

Re claim 4, Rowse discloses the invention except for the lightly welded limitation. Official notice is taken of welding of plates by spot welding and tack welding is known in the container art and that these types of welds have generally less strength than a comparable in size/cross section fully welded joint. The spot or tack welding provides a so called lightly welded joint. It would have been obvious to add a spot or tack weld to provide a lightly welded joint to simply connect plates in a faster/less labor intensive and weld material intensive procedure than a full seam joint weld to save manufacturing costs and time.

Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowse in view of Wright et al. (Wright).

Rowse discloses the invention except for the shape of the panel being domed. Wright teaches overlapping plates for domed ends or domed end panels of a container. It would have been obvious to modify the shape to be domed to provide a shape that reduces the internal

stresses and strain of the panel over a flat panel design with sharp corners where the stress is elevated especially in a design where the pressure may increase rapidly similar to a bomb blast or the pressurization of a pressure vessel.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rowse in view of Wright as applied to claim 7 above, and further in view of Holt et al. (Holt).

The Rowse-Wright combination discloses the invention except for the end plate that overlaps the apexes of the triangular plates that form the blast resistant panel. Holt teaches an end plate as shown best in Fig. 2 that overlaps the apexes of the triangular plates of an end dome. It would have been obvious to add the end plate to protect the overlapped plates from damage that could cause leaks or separation of these triangular plates.

Claims 14, 16, 17 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowse in view of Dennig.

Rowse discloses a blast resistant container having a blast resistant panel comprising a first layer of overlapping plates (see Fig. 3, reference sign 30, 32), a compressible second layer 24 adjacent the first layer, a third layer 28 adjacent the second layer, detonation imparts sliding motion to the plates 30, 32 and compression of the second layer while the third layer restricts motion or displacement and restricts substantial displacement of the second layer. Rowse is specifically designed for air cargo/luggage an art that typically includes doors and has sealable doors. Rowse discloses the invention except for (1) the shape of the shell being spherical and (2) the door. It would have been obvious to modify the shape of the container to be spherical as a matter of design choice and as a matter of prudent engineering design to utilize a shape that reduces the overall amount of stress and provides a consistent amount of stress in all parts of the

container. Dennig teaches a transportable container with a sealable door in a wall. It would have been obvious to add the door since some means for providing ingress and egress of cargo is mandated by an air cargo container.

Re claim 16, Rowse discloses the invention except for the first layer being comprised of a plurality of sub layers with overlapping plates. It would have been obvious to enhance the energy absorbing/energy dissipating characteristics of the first layer by duplication of the single layer as Fig. 2, 11 and 12 teach plural energy dissipating layers.

Re claim 17, Rowse discloses the invention except for the lightly welded limitation. Official notice is taken of welding of plates by spot welding and tack welding is known in the container art and that these types of welds have generally less strength than a comparable in size/cross section fully welded joint. The spot or tack welding provides a so called lightly welded joint. It would have been obvious to add a spot or tack weld to provide a lightly welded joint to simply connect plates in a faster/less labor intensive and weld material intensive procedure than a full seam joint weld to save manufacturing costs and time.

Re claim 24, Rowse discloses the invention except for the door. Doors with door collars 14 are shown by Dennig. Dennig's door has multiple layers of a similar construction to the other non-door walls of the container. Re claim 25, Dennig teaches a door frame formed by members as shown in Fig. 1, parts 16 and 20 and as shown in Fig. 2. Re claim 26, Dennig shows a blast-shield collar as the outer portion of 14 as shown in Fig. 1.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rowse in view of Dennig as applied to claim 14 above, and further in view of Tansill.

The Rowse-Dennig combination discloses the invention except for the honeycomb construction of the second layer. Tansill teaches honeycomb structure 85 formed by individual cells 90 (see Fig. 5 and 6) for a compressible layer adjacent to an inner layer and an outer layer. It would have been obvious to modify the construction of the compressible layer to be honeycomb to control the direction of collapse to be a specific direction while allowing structural stiffness in a direction transverse to the direction of compressibility to provide stiffness, stability and reinforcement in the transverse direction.

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowse in view of Dennig as applied to claim 14 above, and further in view of Wright.

The Rowse-Dennig combination discloses the invention except for the shape of the panel being domed or lune shaped. Wright teaches overlapping plates for domed ends or domed end panels of a container. It would have been obvious to modify the shape to be domed to provide a shape that reduces the internal stresses and strain of the panel over a flat panel design with sharp corners where the stress is elevated especially in a design where the pressure may increase rapidly similar to a bomb blast or the pressurization of a pressure vessel.

Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowse in view of Dennig and Wright as applied to claim 19 above, and further in view of Holt.

The Rowse-Dennig-Wright combination discloses the invention except for the end plate that overlaps the apexes of the triangular plates that form the blast resistant panel. Holt teaches an end plate as shown best in Fig. 2 that overlaps the apexes of the triangular plates of an end dome. It would have been obvious to add the end plate to protect the overlapped plates from damage that could cause leaks or separation of these triangular plates.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rowse in view of Dennig as applied to claim 14 above, and further in view of Megerle.

The Rowse-Dennig combination discloses the invention except for fluid sampling system. Megerle teaches a container with a fluid sampling system having inlet, outlet, circulation lines, pump, and sensor 38. It would have been obvious to add a fluid sampling system to detect hazardous material within the container.

Claim 28 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Stephen J. Castellano/ whose telephone number is 571-272-4535. The examiner can normally be reached on increased flexibility plan (IFP).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony D. Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen J. Castellano/
Primary Examiner
Art Unit 3781

sjc